

Food Truck Entrepreneur

Performance Task

Introduction

A food truck is a large vehicle equipped to cook and sell food. Some sell frozen or prepackaged food while others have on-board kitchens and prepare food from scratch. Sandwiches, hamburgers, french fries, and other regional fast food fare is common. In recent years, food trucks offering gourmet cuisine and a variety of specialties and ethnic menus, have become particularly popular. These trucks can be found in any area with people looking to eat. Many of these trucks specialize in a certain type of food. You will be creating your own food truck and you will need make many decisions related to the food you will be serving, the truck, and your business strategies.

Big Idea / Essential Questions

Big Idea

- Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.
- Mathematical relationships among numbers can be represented, compared, and communicated.

Essential Questions

- How can expressions, equations, and inequalities be used to quantify, solve, model, and/or analyze mathematical situations?
- How is mathematics used to quantify, compare, represent, and model numbers?

G.R.A.S.P.

Goal

Your goal is to determine the freshest and most economical way to get your food in the hands of the public. Your partners have decided to build a food truck that can travel around the region. You will need to develop a business plan to make the truck successful based upon the foods offered, how much you sell, the goods needed for the truck, and the cost of getting the truck from place to place.

Role

You are part of a team of entrepreneurs you have decided to start a food truck business serving fresh food from local farms. You are planning on traveling and selling your food out of a food truck at fairs, outside markets, and carnivals within a 60 miles radius of your location and/or a farm..

Audience

Your team has asked you to create the business plan for this entrepreneurial opportunity. You will need to gather the necessary information and put it together. The team will then make an

informed decision regarding going forward with the creation of the food truck based upon your presentation of the plan.

Situation

Food trucks are becoming very popular across the United States. These trucks can be found in any area with people looking to eat. Many of these trucks specialize in a certain type of food.

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Following are some examples of food trucks and plans for you to take a look at and gather your ideas:

- [Wilmington Food Trucks](#)
- [How to Start a Food Truck](#)

Below are a few videos pertaining to the food truck business.

[Meet the 7-year-old Food Truck Entrepreneur](#)

[How to Consider when Starting a Food Truck](#)

[Secrets of Successful Food Trucks](#)

The following resources may also help the new food truck entrepreneur:

[How to Start a Food Truck Business](#)

[Ten Tips For Preventing Food Truck Failure](#)

[Helpful Tips for Developing Food Truck Menus](#)

Teacher Note: The following website is lengthy but provides a wealth of information related to food truck start-ups. It may be helpful as you consider adaptations to this task: <http://www.entrepreneur.com/article/220060>

Products

1. Map

Find a map of your state and choose a farm area for the home for the food truck and your business. Since you are willing to travel 60 miles from your location, draw a circle, which encompasses the area in which you will be selling your food. Research any fairs, outside markets, or carnivals that will be occurring in this area and identify these on your map.

- What locations will you be able to sell your food within a 60 mile range?
- What markets are promising in that area?

Map - Food Truck Entrepreneur: Aquaculture And Fish Farming

Achievement Levels	1	2	3	4
Geographical Overview (x1)	The map provides the reader with minimal information allowing the reader to gain small pieces of information relating to the geography of the situation.	The map provides the reader with some information of value that allows the reader to gain a basic understanding relating to the geography of the situation.	The map informs the reader and allows the reader to make inferences relating to the geography of the situation.	The map provides a strong overall sense of place and allows the reader to develop vivid mental images relating to the geography of the situation.
Map Details (x1)	Product lacks display of potential selling locations.	Product displays few potential selling locations.	Product adequately displays some potential selling locations within the 60 mile radius.	Product clearly displays potential selling locations within the 60 mile radius.
Mathematical	Product demonstrates minimal	Product demonstrates some	Product demonstrates adequate	Product demonstrates thorough

Achievement Levels	1	2	3	4
	understanding of the concept of area through inaccurate representation and calculations.	understanding of the concept of area through partially accurate representation and calculations.	understanding of the concept of area through mostly accurate representation and calculations.	understanding of the concept of area through accurate representation and calculations.
Business Planning (x1)	Product demonstrates minimal understanding of the planning and considerations that should be taken into account before a business can launch a service or product.	Product demonstrates partial understanding of the planning and considerations that should be taken into account before a business can launch a service or product.	Product demonstrates sufficient understanding of the planning and considerations that should be taken into account before a business can launch a service or product.	Product demonstrates deep understanding of the planning and considerations that should be taken into account before a business can launch a service or product.

2. Fuel Expense Chart

You decided you will take your food truck a maximum of a radius of 60 miles from your current town/city. Using a map, find 3 different places you would like to take your food truck. Make one a short trip (under 15 miles), one a medium trip, and one near the edge of your 60 mile maximum.

Now you will need to determine the fuel cost for that one day (to and from the event) of each location. You will need to research the cost of gas in your area (gasbuddy.com may be a good resource). Assume your truck gets 15 miles per gallon. Create an algebraic equation that can be used to determine your fuel expenses. Be sure to include what each variable stands for.

Next, create a chart that shows the location, number of miles, number of gallons needed and fuel expenses for each of these trips. Be sure to include all labels, units, substituting into your algebraic equations, and all math calculations.

- How can you figure out how many gallons of gas do you need for all the miles you travel?

Fuel Expense Chart: Food Truck Entrepreneur

Achievement Levels	1	2	3	4
Chart Organization (x1)	The data collected is unorganized and lacks appropriate units or labels.	The data collected is somewhat organized in a table or chart containing appropriate units or labels.	The data collected is organized in a table or chart containing appropriate units and labels.	The data collected is organized in a neat, easy to read table or chart containing appropriate units and labels.
Writing Algebraic Equations (x1)	Algebraic equation is incorrect or missing.	Algebraic equation is somewhat correct using variables for the unknowns.	Algebraic equation is correctly shown using variables for the unknowns and some variables are defined.	Algebraic equation is correctly shown using variables for the unknowns and all variables are clearly defined.
Evaluating Equations (x1)	Product shows a minimally correct substitution and evaluating of algebraic equations.	Product shows a mostly correct substitution and evaluating of algebraic equations with some work shown.	Product shows correct substitution and evaluating of algebraic equations with most work shown.	Product shows correct substitution and evaluating of algebraic equations with all work shown.
Mathematical Calculations (x1)	Product shows few correct fuel expense calculations or work involved.	Product shows some correct fuel expense calculations and some of the work involved.	Product shows most of the correct fuel expense calculations including most of the work involved.	Product accurately shows the three fuel expense calculations and includes all work involved.

3. Monthly Budget

Your food truck is already equipped with the appliances you need to make your food. However, there are many other expenses that you will need to cover, such as:

- truck upkeep and insurance (\$200/month),
- paper goods (\$12 for 200 plates & napkins),
- rolls (\$2.34/16 count),

- other food supplies (\$7/month)
- permits/licenses (\$25 for each event).

In a month's time, you plan on attending 8 events, selling at least 400 pieces of your food, and traveling a total of about 600 miles (remember your truck gets 15 miles to the gallon). Show each expense for the month and the total amount it would cost in the budget at the link below.

https://docs.google.com/document/d/1I3IFiaW0U2zwV_afVr2hClgdy2KgRMHTniFj9qeLLnQ/edit?usp=sharing

****Teachers: You need to make your own copy in order to edit the worksheets. Do this by either going to "File" - "Download" to put it on your computer, or "File" - "Make a Copy" will put in your google drive.**

- What are your costs per month?
- How much should you charge per item to make the profit you want?

Monthly Budget - Food Truck Entrepreneur

Achievement Levels	1	2	3	4
Algebraic Equations & Inequalities (x1)	Few algebraic equations/inequalities are correctly shown.	Some algebraic equations/inequalities are correctly shown with variables defined.	Most algebraic equations/inequalities are correctly shown with variables defined.	All algebraic equations/inequalities are correctly shown using variables for the unknowns and all variables are clearly defined.
Evaluating Equations (x1)	Product shows a minimally correct substitution and evaluating of algebraic equations.	Product shows a mostly correct substitution and evaluating of algebraic equations with some work shown.	Product shows correct substitution and evaluating of algebraic equations with most work shown.	Product shows correct substitution and evaluating of algebraic equations with all work shown.
Mathematical Calculations (x1)	Product contains few accurate calculations and/or no work is shown.	Product contains some accurate calculations with a minimal representation of work involved.	Product contains most accurate calculations with an adequate representation of work involved.	Product contains all accurate calculations with a thorough representation of work involved.
Content (x1)	Few areas of the worksheet are complete with work shown and units included.	Some areas of the worksheet are complete with work shown and units included.	Most areas of the worksheet are complete with work shown and units included.	All areas of the worksheet are complete with work shown and units included.

4. Research Proposal

You will need to conduct research to determine the type of food that you would like to sell using foods from your farm as part of your offerings. You will need to consider the environmental factors that are needed for these foods to grow and be sustainable. Consider the ecosystem where they are typically found. Can you create the same environment within your farm? You will also want to choose foods that are tasty and popular with the customers.

- What type of fish are popular menu items?
- In what environment do your selected fish thrive?
- What else is needed in a saltwater or freshwater environment?

Research Proposal - Food Truck Entrepreneur: Aquaculture And Fish Farming

Achievement Levels	1	2	3	4
	No apparent arrangement of content. Writing has	Unclear arrangement of content yet some effective transitions.	Logical arrangement of content with some effective transitions.	Appropriate and clear arrangement

Organization and Content (x1)	minimal focus, or purpose of task. (Unless waived, APA/MLA style is utilized throughout with many errors.)	Writing has some focus and purpose of task. (Unless waived, APA/MLA style is utilized correctly throughout with some errors.)	Writing demonstrates focus of content and purpose of task. (Unless waived, APA/MLA style is utilized correctly throughout with a few errors.)	of content with effective transitions. Writing has good focus and purpose of task is well defined. (Unless waived, APA/MLA style is utilized correctly throughout with very few errors.)
Research (x1)	Product demonstrates a lack of research conducted around the topic.	Product demonstrates that minimal research was conducted around the topic using few credible or appropriate sources.	Product demonstrates that some research was conducted around the topic using some credible or appropriate sources.	Product demonstrates that thorough research was conducted around the topic, using several sources that are credible and appropriate.
Conventions and Style (x1)	Poor word choice used with little control of sentence formation. Errors are present in grammar, usage, spelling and punctuation. Writing style interferes with meaning.	Minimal variety of words used with limited and/or inconsistent control of sentence formation. Many errors may be present in grammar, usage, spelling and punctuation. Writing style interferes with meaning.	Variety of words used with adequate control of sentence formation. Some errors may be present in grammar, usage, spelling and punctuation. Overall writing style demonstrates adequate use of language and tone.	Variety of words used with thorough control of sentence formation. Few errors, if any, are present in grammar, usage, spelling and punctuation. Overall writing style demonstrates consistent use of language and tone.
Organisms and their Environments (x1)	Product demonstrates lack of understanding of environmental factors that must be considered and reproduced for growth of the organism.	Product demonstrates minimal understanding of environmental factors that must be considered and reproduced for growth of the organism.	Product demonstrates some understanding of environmental factors that must be considered and reproduced for growth of the organism.	Product demonstrates strong understanding of environmental factors that must be considered and reproduced for growth of the organism.
Business Planning (x1)	Product demonstrates minimal understanding of the planning and considerations that should be taken into account before a business can launch a service or product.	Product demonstrates partial understanding of the planning and considerations that should be taken into account before a business can launch a service or product.	Product demonstrates sufficient understanding of the planning and considerations that should be taken into account before a business can launch a service or product.	Product demonstrates deep understanding of the planning and considerations that should be taken into account before a business can launch a service or product.

5. Food Truck Design

You will want to present your team with a name, logo, and design for your food truck. The design should allow people to recognize your truck quickly and give potential customers an idea of what the food truck sells. Also provide two or three menu items that you hope the truck will become known for by customers.

- What shapes and images support your vision for a logo?
- What colors will you use to grab people's attention?
- Where on your truck would you place your logo and other information about menu items?

Food Truck Design - Food Truck Entrepreneur: Aquaculture And Fish Farming

Achievement Levels	1	2	3	4
General Formatting (x1)	Graph paper or a computer graphic tool is used to create the drawing. The drawing's size makes the details difficult to see. The drawing is minimally neat.	Graph paper or a computer graphic tool is used to create the drawing. The drawing's size makes it somewhat readable. Some details are clear and the drawing is to scale.	Graph paper or a computer graphic tool is used to create the drawing. The drawing is large enough that the details are clear. It is mostly neat and to scale.	Graph paper or a computer graphic tool is used to create the drawing. The drawing is large enough for details to be clear. The drawing is neat and to scale.
Design Creativity (x1)	Product reflects minimal use of creativity in the designs for logo and menu items.	Product reflects some use of creativity through the inclusion of color, shape and wording to make designs for logo and menu items.	Product reflects sufficient use of creativity through the inclusion of color, shape and wording to make unique designs for logo and menu items.	Product reflects excellent use of creativity through the inclusion of color, shape and wording to make unique designs for logo and menu items.
Design Considerations (x1)	Design choices reflect little consideration of the audience for whom the product is created.	Design choices reflect some consideration of the audience for whom the product is created.	Design choices reflect satisfactory consideration of the audience for whom the product is created.	Design choices reflect thorough consideration of the audience for whom the product is created.

Achievement Levels	1	2	3	4
Business Planning (x1)	Product demonstrates minimal understanding of the planning and considerations that should be taken into account before a business can launch a service or product.	Product demonstrates partial understanding of the planning and considerations that should be taken into account before a business can launch a service or product.	Product demonstrates sufficient understanding of the planning and considerations that should be taken into account before a business can launch a service or product.	Product demonstrates deep understanding of the planning and considerations that should be taken into account before a business can launch a service or product.